UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

20792

7590

08/15/2005

MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627

EXAMINER
LEE, HSIEN MING

ART UNIT

PAPER NUMBER

2823

DATE MAILED: 08/15/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,553	10/28/2003	Young-Nam Hwang	5649-1195	5476

TITLE OF INVENTION: PHASE CHANGEABLE MEMORY DEVICES AND METHODS OF FORMING THE SAME IN WHICH AN UPPER ELECTRODE INCLUD A TIP THAT EXTENDS TOWARD A LOWER ELECTRODE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	11/15/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATEN PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHT THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPO PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM TH MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THE STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOV REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (O AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WIL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is n claiming SMALL ENTITY status, check box 5a on Part B - Fee Transmittal and pay the PUBLICATION FEE (if required) and 1 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) w your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450

			or <u>Fax</u>	(571) 273-2885			
INSTRUCTIONS: This for appropriate. All further condicated unless corrected maintenance fee notification	orm should be used for tran orrespondence including the below or directed otherwise ons.	smitting the ISSU Patent, advance of in Block 1, by (a	JE FEE and PUBL rders and notification a) specifying a new	ICATION FEE (if req n of maintenance fees correspondence addres	uired). Blocks 1 through 5 s will be mailed to the current s; and/or (b) indicating a sep	hould be completed wh correspondence address arate "FEE ADDRESS"	
CURRENT CORRESPONDEN	CE ADDRESS (Note: Use Block 1 for	any change of address)		Note: A certificate of	of mailing can only be used f	or domestic mailings of	
				Fee(s) Transmittal. T	his certificate cannot be used	for any other accompany	
20792	7590 08/15/2005			have its own certifica	nal paper, such as an assignmate of mailing or transmission.	ent or formal drawing, m	
MYERS BIGEL	SIBLEY & SAJOVE	EC		C	ertificate of Mailing or Trans	emission	
PO BOX 37428 RALEIGH, NC 27627				I hereby certify that States Postal Service addressed to the Management	this Fee(s) Transmittal is bein with sufficient postage for fin ail Stop ISSUE FEE address PTO (571) 273-2885, on the	g deposited with the Un est class mail in an envel above, or being facsim	
				transmitted to the US	SPTO (571) 273-2885, on the		
						(Depositor's na	
						(Signat	
						(D	
APPLICATION NO.	FILING DATE		FIRST NAMED INVE	NTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/695,553	10/28/2003		Young-Nam Hw	ang	5649-1195	5476	
TITLE OF INVENTION: 1 A TIP THAT EXTENDS T	PHASE CHANGEABLE ME OWARD A LOWER ELECT	MORY DEVICES TRODE	AND METHODS	OF FORMING THE S	AME IN WHICH AN UPPER	ELECTRODE INCLUD	
APPLN. TYPE	SMALL ENTITY	ISSUE F	EE 1	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1400)	\$300	\$1700	11/15/2005	
EXA	MINER	ART UN	IIT (CLASS-SUBCLASS	7		
LEE, HSIEN MING		2823		257-004000			
1. Change of corresponden	Change of correspondence address or indication of "Fee Address" (37 2. For printing on the patent front page, list						
CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.			(1) the names of up to 3 registered patent attorneys 1				
Address form PTO/SB/1	122) attached.	n (or "Fee Address" Indication form					
Number is required.			2 registered pater listed, no name v	nt attorneys or agents. I vill be printed.	f no name is 3		
	D RESIDENCE DATA TO B		-				
PLEASE NOTE: Unles recordation as set forth i	s an assignee is identified be n 37 CFR 3.11. Completion of	low, no assignee of this form is NO	data will appear on Γa substitute for fili	the patent. If an assigng an assignment.	gnee is identified below, the c	locument has been filed	
(A) NAME OF ASSIGN				TY and STATE OR CO	DUNTRY)		
				_			
	e assignee category or category				Corporation or other private gr	oup entity Governm	
4a. The following fee(s) are	e enclosed:	4b	. Payment of Fee(s)				
Issue Fee			_	mount of the fee(s) is e			
	small entity discount permitte			dit card. Form PTO-203			
☐ Advance Order - # o	f Copies	 _	The Director is Deposit Account N	hereby authorized by umber	charge the required fee(s), or (enclose an extra c	credit any overpayment opy of this form).	
	(from status indicated above		_			,	
	SMALL ENTITY status. See :				ALL ENTITY status. See 37 C		
The Director of the USPTO NOTE: The Issue Fee and I interest as shown by the rec	is requested to apply the Issu Publication Fee (if required) we ords of the United States Pate	e Fee and Publicate vill not be accepted nt and Trademark	tion Fee (if any) or to I from anyone other Office.	re-apply any previous than the applicant; a re	sly paid issue fee to the applica gistered attorney or agent; or the	ation identified above. he assignee or other part	
Authorized Signature	Authorized Signature Date						
Typed or printed name _	Typed or printed name Registration No						
This collection of information application Confidential	on is required by 37 CFR 1.3	1. The informatio	n is required to obta	in or retain a benefit by	the public which is to file (and	d by the USPTO to proc	

In soliection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to proc an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to comp this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 14 Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/695,553	10/28/2003	Young-Nam Hwang	5649-1195	5476	
20792 75	590 08/15/2005		EXAMINER		
MYERS BIGEL PO BOX 37428	SIBLEY & SAJOVE	CC C	LEE, HSIEN MING		
	RALEIGH, NC 27627			PAPER NUMBER	
			2823		
			DATE MAILED: 08/15/2005		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 16 day(s). If the issue fee is paid on the date that is three months after t mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a ha months) after the mailing date of this notice, the Patent Term Adjustment will be 16 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date th determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retriev (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.